Governor's Forest Health Council Position Paper on the Economics of Restoration

Restoring Arizona's forests offers an opportunity for rural communities and public land managers (state and federal) to address the decline in the health of our forests in a manner that stimulates and cultivates economic development. Understanding the economics of implementing forest restoration treatments is critical to reaching informed decisions about public and private investments in resource management. This paper will highlight the work of the Governor's Forest Health Council ("The Council") with respect to forest restoration economics.

In 2004, the Arizona Forest Health Advisory and Oversight Councils developed a set of guiding principles to guide the sustainable utilization of community protection and forest restoration by-products. The Guiding Principles address the development of businesses, jobs, and infrastructure based on forest restoration. The zone of agreement established through the development of the "*Guiding Principles*" was carried into and expanded upon in *The Statewide Strategy for Restoring Arizona's Forests* (known as "The Statewide Strategy"), published in June 2007 (Aumack et al. 2007).

The Statewide Strategy outlines five key strategies as the foundation for action to successfully restore Arizona's Forests. One of those key strategies is to "encourage ecologically sustainable, forest-based economic activity." (Aumack et al. 2007, p. xii). The economic chapter of the Statewide Strategy specifically looks at economic considerations for restoring forest health and reaches the conclusion that "most forest restoration in Arizona is publicly subsidized," (ibid., p. 29) and "there are not enough federal and state dollars to pay for treatments on all the acres that need restoration" (ibid., p. 29).

Based on this reality, the Council has taken a two-prong approach to developing a viable restoration economy to accomplish the goals of unnatural fire risk reduction and forest health restoration: (1) seek and effectively use federal dollars to implement science-based restoration treatments that help stimulate the market for small-diameter materials, and (2) develop private, forest-based enterprises that can pay for wood and biomass harvested by treatments and, therefore, generate funding that will offset treatment costs.

(1) <u>Federal Investment in Forest Restoration</u>

The federal government has taken important initial steps to encourage a restoration economy by making grants available for biomass and infrastructure improvements (ibid., pp.13, 30) and providing a new contracting tool—stewardship end-result contracting. (ibid., p.30)

In Arizona, federal investment through stewardship contracting is yielding results in the White Mountains. In 2004, the Forest Service awarded the ten-year White Mountain Stewardship Contract to Future Forest LLC, a partnership of local businesses. This contract is designed to restore forest health, support local economies, and encourage investment in biomass utilization by focusing on the ecological needs of the area and guaranteeing for the contract term a supply of wood to the contractor. Since implementation of the contract, the cost of forest restoration treatments has been reduced significantly, from $1,100 per acre to approximately $550 per acre, and treatments of larger areas are now possible (White Mountain Stewardship Project 2009).

Additionally, the contract has had a positive impact on the economy of the White Mountain region. The commercial utilization of the woody biomass generated from forest treatments supports 15 firms and many full-time equivalent employees (FTEs) (Gibson 2007, p.6). Employment data collected shows 450 FTEs in 2005, 246 FTEs in 2006, and 228 FTEs in 2007[1]. (ibid., p.6) The number of full-time jobs can vary dramatically from year to year depending on markets and where businesses are purchasing wood. The Statewide Strategy Scorecard (currently under development) hopes to better capture this data on a statewide basis. The Council supports the use of the stewardship contracting tool to achieve forest restoration objectives while simultaneously meeting local and rural community needs (Aumack et al. 2007, pp.xiv, 31). Moreover, the Council continues to support the federal investment in the White Mountain Stewardship Contract, although it recognizes that future contracts using the White Mountain model may not be forthcoming and would not be advantageous or cost-effective to implement treatments at the pace and scale necessary to restore our forests.

(2) Development of Private Industry to Offset Treatment Costs

Developing forest utilization enterprises that can offset treatment costs will be necessary to achieve the long-term restoration of our forests. Members of the Council began addressing this challenge in 2007 through the implementation of Statewide Strategy recommendation 4.1.1. This recommendation calls on the U.S. Forest Service to conduct a collaborative and objective evaluation of the amount, availability, and characteristics of wood and biomass available for utilization across Arizona (Aumack et al. 2007, p. xiv).

This effort became the U.S. Forest Service–funded *Analysis of Small-Diameter Wood Supply in Northern Arizona* (known as "The Wood Supply Analysis"), an approximately eight-month collaboration of a 20-member diverse stakeholder group. The wood supply analysis revealed that there was consensus among the group members that 41 percent of the 2.4 million-acre analysis area needs some level of restoration-based, mechanical-thinning treatment. That translates into approximately 987,000 acres in need of mechanical thinning yielding 847 million cubic feet of wood and 8 million green tons of biomass. (Hampton et al. 2008, pp. 58-59). This analysis demonstrates that there is plenty of wood available from restoration-based treatments on the Mogollon Rim to support many types of forest utilization enterprises for ten years or more.

Currently, the Council and the U.S. Forest Service are working together to identify a path forward to accelerate restoration work across northern Arizona. In June 2008, the Council created a landscape restoration implementation working group and charged it with setting design parameters for a landscape-scale project and developing options for accelerating implementation of industry-supported landscape-scale restoration. On October 6, 2008, the Southwestern Region Restoration Task Group (2008), which included four representatives from the landscape restoration implementation working group, completed a draft report entitled, *Alternative Approaches to Accelerating Forest Restoration in Northern Arizona*. The draft report was submitted to the Regional Forester for consideration. The draft report focused on accelerating implementation of 30,000 acres of industry-supported restoration per year in addition to the current 17,000 acres annual rate of agency-supported restoration. The draft report outlined two

[1] The 2005 FTE total was substantially higher than the FTE totals in 2006 and 2007 because that year included purchases made by a Phoenix firm that ceased being a Future Forest customer. (Gibson pp.6)

conceptual approaches to accelerating forest restoration that would: (1) improve and increase efficiencies and (2) shift costs to sources other than Federal appropriations. (Southwestern Region Restoration Task Group 2008, p. 3). Options discussed included reducing the costs of planning and preparation from $360 per acre to about $175 per acre and ways in which the current costs of extraction of $550 per acre to the Forest Service could be substantially reduced with the help of private industry (Bright 2008).

In conclusion, the Council therefore urgently restates the "need to develop a viable restoration economy to accomplish the goals of community protection and forest restoration" as outlined in the *Guiding Principles for A New Economy Based on Forest Restoration* (Restoration Economy Subcommittee of the Arizona Forest Health Advisory and Oversight Councils 2004, p. 1) and in the *Statewide Strategy for Restoring Arizona's Forests* (Aumack et al. 2007). The Council looks forward to the emergence of appropriately sized, economically sustainable private industry demonstrably committed to the principles of restoration and collaboration, and able to dramatically offset the costs the landscape-scale restoration while contributing significantly to the rural economic development of northern Arizona.

References

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